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| 09/664,364 | 09/18/2000 | Jin-Tae Roh | 3449-0131P | 3941 |

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EXAMINER

PSITOS, ARISTOTELIS M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2653

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|---|--|--|
| <p align="center">Office Action Summary</p> | <p>Application No.</p> <p align="center">09/664,364</p> | <p>Applicant(s)</p> <p align="center">ROH ET AL.</p> | |
| | <p>Examiner</p> <p align="center">Aristotelis M. Psitos</p> | <p>Art Unit</p> <p align="center">2653</p> | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicants' response of 1/27/05 has been considered with the following results.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Response to Amendment

Applicants' amendment to the title is noted. Nevertheless, the distinction focusing upon the two field(s) ability for optimizing recording is NOT found in the new title. Appropriate correction is REQUIRED.

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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1. Claim 13 is rejected under the judicially created doctrine of double patenting over claim 3 of U. S. Patent No. 6813107 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

| Pending claim | claim 3 of 6813107 |
|--|---|
| 13. An optimal recording apparatus for optical recording media comprising: | introductory paragraph, lines 1-7: an apparatus for performing test recording on a storage medium, |
| a recording unit recording optional data, as test data, onto a test area of an optical recording medium while varying a format of recording signals; | first element in the claim, lines 8-9: a writer configured to |
| a reproduction unit reproducing the test data; | inherent |
| a jitter measuring unit measuring respective jitters of reproduced signals outputted from the reproduction means; | inherent |
| and | |
| a control unit determining an optimum write strategy, based on the measured jitters. | second element, lines 10-11 |

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In the above analysis, the claimed elements in the present claim are inherently present in the above claim, i.e., failure to provide for any element/means/unit/section/apparatus/hardware for the reproduction of the recorded test signal would yield a non-operable system as claimed in the patent.

With respect to the jitter measuring unit as claimed, such is the ability of the claimed controller.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

If applicants' could convince the examiner that such "jitter" is not inherently present in the above patent claim, the claim would be further rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. . 6813107 in view of Ide et al.

Ide et al – us patent 5513165 – additionally teaches "jitter" and its detection in this environment. See the discussion with respect to "jitter"

It would have been obvious to modify the base system of claim 3 in the above US patent with the additional "jitter" ability, motivation is to compensate for such "jitter" and yield a substantially better written signal.

2. Claim 14 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6813107 as analyzed above in paragraph 1 in view of Kirino et al.

The ability of pulse level variation relying upon/using a variation of the focusing distance is not found in the above documents.

Kirino et al teach in this environment, the additional ability of encompassing, using a variation in focus ability in order to perform a better jitter performance – see the discussion commencing at col. 3 line 1 till line 64.

It would have been obvious to modify the base system as stated above in paragraph 1 with the additional teaching from Kirino et al, motivation is for the reasons stated in Kirino et al.

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3. Claim 15 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6813107 in view of Kim ('965).

Kim additionally teaches the ability of having a reference power level and appropriate control capability thereto.

It would have been obvious to modify the base system as stated above in paragraph 1 with the additional opc ability, motivation is to use standard opc subsystems and permit backward compatibility with existing reproducers/formatted discs.

4. Claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6813107 in view of Mazewa.

With respect to the limitations of claim 16, Mazewa further teaches in this environment, the ability of calculating the "jitter" signal predicated upon an "integration" of the signal difference.

5. Claim 13 is rejected under the judicially created doctrine of double patenting over claim 9 of U. S. Patent No. 6404712 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Pending claim

claim 9 of 6404712

Parent claim 8

13. An optimal recording apparatus for optical recording media comprising:

introductory paragraph, lines 1-2:
an apparatus for optimally recording information on an optical medium, comprising

element in claim 8, lines 6-9:

a recording unit recording optional data, as

recording means

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test data, onto a test area of an optical
recording medium while varying
a format of recording signals;

element in claim 8, line 10

a reproduction unit reproducing the test data;

reproducing means ...

claim 9,

a jitter measuring unit measuring respective jitters of
reproduced signals outputted from the reproduction means;
and

defines the properties

claim 8, last recited means

a control unit determining an
optimum write strategy, based on
the measured jitters.

In the above analysis, the examiner interprets the controlling means to meet both
The claimed jitter measuring unit and the control unit, since the controlling means "determines" the
optimum writing power.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims
corresponding to those of the instant application during prosecution of the application, which matured into
a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

If applicants can convince the examiner that the controller of the claim does not "calculate", then
the examiner would rejected the claim under the judicially created doctrine of obviousness-type double
patenting as being unpatentable over claim 9 of U.S. Patent No. 6404712 in view of Yoshimura et al.

Yoshimura et al – additionally provides for "jitter" measuring ability. See the description of his jitter
measuring section with respect to element 9.

It would have been obvious to modify the base system of claim 9 of the above US patent with the
additional teaching from Yoshimura et al, motivation is to provide for a "calculation" of the optimum power
signal, as opposed to a "determination" of such.

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6. Claim 14 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6404712 as analyzed above in paragraph 5 in view of Kirino et al.

The ability of pulse level variation relying upon/using a variation of the focusing distance is not found in the above documents.

Kirino et al teach in this environment, the additional ability of encompassing, using a variation in focus ability in order to perform a better jitter performance – see the discussion commencing at col. 3 line 1 till line 64.

It would have been obvious to modify the base system as stated above in paragraph 5 with the additional teaching from Kirino et al, motivation is for the reasons stated in Kirino et al.

7. Claim 15 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6404712 in view of Kim ('965).

Kim additional teaches the ability of having a reference power level and appropriate control capability thereto.

It would have been obvious to modify the base system as stated above in paragraph 5 with the additional opc ability, motivation is to use standard opc subsystems and permit backward compatibility with existing reproducers/formatted discs.

8. Claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6404712 in view of Mazewa.

With respect to the limitations of claim 16, Mazewa further teaches in this environment, the ability of calculating the "jitter" signal predicated upon an "integration" of the signal difference.

9. Claims 20 and 25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6813107 in view of Spruit et al.

The following analysis is made:

Claim 20.

6813107 clam 8

An optimal recording method for optical

preamble – lines 1-6

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recording media comprising the steps of:

recording test data onto a test area of
an optical recording medium while
varying a format of recording signals,
and reproducing test data;

first step

inherently present, else
no further ability capable

measuring respective jitters of reproduced signals;
and

see Spruit et al
with respect to his jitter detector

determining an optimum write strategy
based on the measured jitters.

last step of claim 8 in above
Patent 6813107

In the above analysis, the above noted claim only "determines" the optimal writing parameter based on the test recording read from the storage medium.

Spruit et al further teaches/discloses that the optimum writing capability, can be from a "measuring" of the jitter.

It would have been obvious to modify the base system of US patent 6813107 with the additional teaching from Spruit et al, motivation is to permit an actual calculation as to purely a mere determination, and hence permit a better signal recording ability, i.e., a "dynamic" one as opposed to a "static" one.

With respect to claim 25, the above system inherently "involving the smallest jitter" so as to optimize its capability. One normally optimizes involving the "smallest" jitter/error .

10. Claim 21 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6813107 as further modified by Spruit et al as discussed above in paragraph 9, and further in view of Kirino et al.

The ability of pulse level variation relying upon/using a variation of the focusing distance is not found in the above documents.

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Kirino et al teach in this environment, the additional ability of encompassing, using a variation in focus ability in order to perform a better jitter performance – see the discussion commencing at col. 3 line 1 till line 64.

It would have been obvious to modify the base system as stated above in paragraph 9 with the additional teaching from Kirino et al, motivation is for the reasons stated in Kirino et al.

11. Claim 22 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6813107 as further modified by Spruit et al as discussed above in paragraph 9, and further in view of Kim('965).

Kim additional teaches the ability of having a reference power level and appropriate control capability thereto.

It would have been obvious to modify the base system as stated above in paragraph 9 with the additional opc ability, motivation is to use standard opc subsystems and permit backward compatibility with existing reproducers/formatted discs.

12. Claims 23-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6813107 as further modified by Spruit et al as discussed above in paragraph 9, and further in view of Sakaue et al.

With respect to the limitation(s) focusing upon detecting the "3T" signal as the specific component, applicants' attention is drawn to the disclosure of tables 14 and 18 in Sakaue et al as it.

It would have been obvious to modify the base system as noted above in paragraph 9 and the analysis therein, with the additional teaching/modification from Sakaue et al, motivation is to permit a proper signal evaluation procedure for relatively short pulses and hence increase the c/n thereof.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

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Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 12, 26 are rejected under 35 U.S.C. 102(b/e) as being anticipated or alternatively as being obvious over JP 3057875 further considered with either Honda et al or Udagawa.

The following analysis is made:

MAT (machine assisted translation of)
JP 3057875

Claim 12

An optimal recording method for optical
recording media comprising the steps of:

see paragraph 1 of the MAT

(a) reading out a reference power value
recorded on an optical recording medium;

see paragraph 3 – reading opc test area

(b) recording optional data, as test data,
onto a first field of a test area in
the optical recording medium while
varying a recording power value
with reference to the read reference power;

see paragraph 3, recording test data
in one of the 100 partitions

(c) reproducing the test data recorded
on the first field, thereby
determining an optimum recording
power value, based on characteristics of the

see paragraph 4, reproduces such
recorded test data signal(s)

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resultant reproduced signals;

(d) recording optional data, as test data, see paragraph 7 – plural fields
onto a second field of the test area in the test area
while varying a format of recording signals,
using the determined optimum
recording power value; and

(e) reproducing the test data, see mat starting at paragraph 10
recorded in the second field in accordance
with the varied recording signal format,
determining an optimum write
strategy based on characteristics
of the resultant reproduced signals, and storing
the optimum' write strategy.

In the above analysis, the examiner is presently relying upon the MAT (machine assisted translation) of the JP. Upon further translation(s) of the document, such will be made available to applicants. As noted in above passages (paragraphs) the JP system provides for the first and second filed/test area – and the ability of writing test data thereto (the claimed optional data). Applicants' attention is then drawn to paragraph 10-17, as well as 20-25 for further meeting the claimed ability with respect to claimed ability of determining the optimum write strategy.

If applicants can convince the examiner that such above noted passages do not meet the claimed determination recitation, then the examiner would further rely upon either Honda et al or Udagawa.

With respect to the determination ability, either Honda et al – see description of figure 1 teaches such, or alternatively with respect to Udagawa – see the description of figure 14 – which also teaches such. It is also noted that these paragraphs also refer to a method/system as described in JP 05-144004.

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The examiner is also providing a copy of the MAT for such, and as indicated therein, appropriately recorded test signals are provided throughout the 15 atip frame/fields and hence could also be relied upon as the base reference. The description with respect to the 15 atip frames/fields further support applicants' statement of the acknowledged prior art systems as found referring to figure 10 of the present application.

It would have been obvious to modify the base system of the above noted JP document and provide for a determination of the optimum write strategy as required by the claims, motivation is to permit such proper determination.

With respect to claim 26, note paragraph 14 in the above MAT which also discusses the ability of decision predicated upon modulation factor – which the examiner interprets as meeting the claimed phrase modulation degree.

14. Claim 26 rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 12 as stated in paragraph 13 above, and further in view of PCT wo/0115148 - Ogawa et al – see the description in the US equivalent US patent 6859426 with respect to the description of the modulation degree factor/value/parameter “m” and use thereof in place of the traditional “beta” value.

Although the examiner has rejected claim 26 as part of the disclosed invention of the base JP document, if applicants' can convince the examiner that such a limitation is not inherently present in the JP document, Ogawa et al also discloses such an ability. Hence the examiner is also providing this rejection.

It would have been obvious to modify the base system as described above in paragraph 13 with the additional teaching from Ogawa et al, motivation is to add additional factors/parameters as part of the optional test data so as to permit use of alternative formatted discs available in the market place and hence increase the flexibility of the overall system.

15. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 12 in paragraph 13 above, and further in view of Yoshida et al.

With respect to the limitation focusing upon “asymmetries”, Yoshida et al teach the ability of calculation/measuring and performing appropriate write strategy decisions.

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It would have been obvious to modify the base system as stated above in paragraph 13 with the additional asymmetry capability taught by Yoshida et al for the reasons discussed therein.

16. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 12 as stated in paragraph 13 above, and further in view of Osakabe.

With respect to the limitation of claim 28 "involving the smallest jitter", the examiner interprets the ability of Osakabe as measuring/determining predicated upon the "best" parameter as meeting such limitation.

It would have been obvious to modify the base system as stated above in paragraph 12 with the additional teaching from Osakabe so as to establish/involve the smallest jitter, and hence provide a system optimized accordingly. Predicating decisions upon "the best" parameter(s) insures proper evaluation/determination upon the "least" jitter.

17. Claims 13, 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 3057875 further considered with Ishibashi et al. The following analysis is made:

Claim 13

JP 3057875 MAT thereof

An optimal recording apparatus for optical recording media comprising:

see paragraph 1 of the MAT

a recording unit recording optional data, as test data, onto a test area of an optical recording medium while varying a format of recording signals;

see paragraph 3 – reading opc test area means record exist(s)

a reproduction unit reproducing the test data;

see paragraph 4, reproduces such

a jitter measuring unit measuring respective jitters of

see mat starting at paragraph 10

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reproduced signals outputted from the reproduction means;

and

a control unit determining an
optimum write strategy, based on
the measured jitters.

element 3 figure 1 is interpreted as
the control unit.

JP 3057875 is relied upon for the reasons stated above in paragraph 12 and as analyzed above. Although there is no clear description of the term "jitter" measuring, the examiner equates/interprets the beta evaluation and/or degree of modulation as "jitter" and such are measured hence under 102 considerations, the claimed limitations are met.

If applicants can convince the examiner that such is not the case, then under 103 considerations, the examiner will rely upon (does rely upon) the additional "jitter" measuring ability of Ishibashi et al, see the jitter measurement apparatus and its discussion with respect to figure 1.

It would have been obvious to modify the base system in the JP document with the additional "jitter" measurement so as to ensure proper signal recording/reproducing.

With respect to claim 15, the ability of having reference power extraction ability/means is further discussed in paragraph 7 of the MAT. Such is believed to be encompassed by the JP 5-144004 document.

It would have been obvious to modify the base system the MAT and also use the disclosed JP teaching as acknowledged by the MAT for the ability of using OPC approach in the optimization of the power level.

18. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 13 as stated in paragraph 17 above, and further in view of Ishibashi et al.

Ishibashi et al teaches the ability of adapting his jitter circuitry so as to compensate for focus distance.

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It would have been obvious to modify the base system in the JP document with the additional focus compensation so as to ensure proper signal recording/reproducing.

19. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 13 as stated in paragraph 17 above, and further in view of Mazewa.

With respect to the limitations of claim 16, Mazewa further teaches in this environment, the ability of calculating the "jitter" signal predicated upon an "integration" of the signal difference.

It would have been obvious to modify the base system as relied upon in paragraph 17 above and further include the "jitter" circuitry of Mazewa, motivation is to provide use of existing circuitry and hence save valuable resources, such as time in designing alternative circuits for performing the "jitter" measuring.

20. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being unpatentable over JP 3057875, or alternatively under 35 USC 103 (a) as being unpatentable over JP 3057875 further considered with JP 07-287847.

Applicants' attention is drawn to the above analysis with respect to the JP 3057875 document. Obviously there is a record medium therein.

Alternatively, applicants' attention is further drawn to JP 07-287847 – MAT (machine assisted translation) especially with respect to the paragraphs starting at paragraph 12, which refers to dividing the partition into a plurality of fields, as well as various trial (test writing) in partitions 1-100, and having at least 3 fields ER1-ER3 – see figure 1 as it refers to the record medium and the partitions/fields thereon.

The examiner further relies upon such for also teaching the above medium having first and second fields for recording with factors - see paragraph 20-35 wherein the beta value is appropriately determined from two factors – as interpreted by the examiner.

21. Claims 13, 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 07-287847 further considered with Ishibashi et al. The following analysis is made:

Claim 13

JP 07-287847 MAT thereof

An optimal recording apparatus for optical

see abstract of the MAT

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recording media comprising:

a recording unit recording optional data, see figure 2/paragraphs
as test data, onto a test area of an optical recording 20-end, elements 2-5
medium while varying a format of recording
signals;

a reproduction unit reproducing the test data; see above, 5 reproduces such

a jitter measuring unit measuring respective jitters of see mat starting at paragraph 20
reproduced signals outputted from the reproduction means; beta is so interpreted
and

a control unit determining an element 10 figure 2 is interpreted as
optimum write strategy, based on the control unit.
the measured jitters.

In the above analysis the examiner interprets the calculations performed to yield the beta values as the ability of measuring the jitter as claimed, and hence the cpu element 10 yields the final determination for optimum write strategy.

If applicants can convince the examiner that such is not "jitter", then the examiner would rely upon the additional teaching from Ishibashi et al for teaching such.

It would have been obvious to modify the base system in the JP document with the additional "jitter" measurement so as to ensure proper signal recording/reproducing.

With respect to claim 15, the OPC is interpreted as the meeting the reference power value extracting limitation.

22. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 13 as stated in paragraph 17 above, and further in view of Ishibashi et al.

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Ishibashi et al teaches the ability of adapting his jitter circuitry so as to compensate for focus distance.

It would have been obvious to modify the base system in the JP document with the additional focus compensation so as to ensure proper signal recording/reproducing.

23. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 13 as stated in paragraph 21 above, and further in view of Mazewa.

With respect to the limitations of claim 16, Mazewa further teaches in this environment, the ability of calculating the "jitter" signal predicated upon an "integration" of the signal difference.

It would have been obvious to modify the base system as relied upon in paragraph 21 above and further include the "jitter" circuitry of Mazewa, motivation is to provide use of existing circuitry and hence save valuable resources, such as time in designing alternative circuits for performing the "jitter" measuring.

24. Claims 20, 23 and 25 are rejected under 35 USC 102 (b) as being anticipated by either JP 07-278847 or JP 3057875. The following analysis is made:

| claim 20 | JP 07-278847 | JP 3057875 |
|--|---|---|
| An optimal recording method for optical recording media comprising the steps of: | abstract in MAT | paragraph 1 in the MAT |
| recording test data onto a test area of an optical recording medium while varying a format of recording signals, | see paragraphs with respect to figures 1 & 3 (starting at paragraph 20) | see paragraphs with respect to figure 2, starting at paragraph 19 |
| and reproducing test data; | | |
| measuring respective jitters of reproduced signals; and | beta evaluation | beta & modulation factor evaluation |
| determining an optimum write strategy | end result | end result |

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based on the measured jitters.

In the above analysis, either of the JP documents perform optimization of the write strategy predicated upon "jitter" measurement. Wherein the examiner interprets the beta, and beta & modulation factor evaluation(s) as discussed in the above MATs of the JP documents as the claimed "jitter" measurement.

With respect to claim 23, both systems measure jitter with respect to a specific component among reproduced signals, either the 11T or some variation thereof.

With respect to claim 25, since the object of either system is to yield the best fit to the beta curve, such capabilities meet the limitation as described in claim 25, "involving the smallest jitter".

25. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 20 above, and further in view of Kirino et al.

With respect to the limitation as recited in claim 21, such is not found in the above noted JP documents.

Kirino et al teach in this environment, the additional ability encompassing, using a variation in focus ability in order to perform a better hitter performance, see the discussion commencing at col. 3 line 1 till line 64.

It would have been obvious to modify the base system of either JP document with the above teaching as further disclosed in Kirino et al, motivation is as discussed in Kirino et al.

26. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 20 above, and further in view of Kim('965).

Kim additional teaches the ability of having a reference power level and appropriate control capability thereto.

It would have been obvious to modify either of the base systems as stated above in paragraph 24 with the additional opc ability, motivation is to use standard opc subsystems and permit backward compatibility with existing reproducers/formatted discs.

27. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 20 above, and further in view of JP 07-287847.

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With respect to the 3T designation as the specific component, note paragraphs 27-28 in the JP 07-287847 document.

Hence, claim 24 is either anticipated by the JP 07-287847 teaching or rendered obvious from such a teaching, use of such a specific component, while JP 3057875 is obvious in further modifying such system to focus upon the 3T component for evaluation purposes.

28. The indicated allowability of claims 13-16 and 20-22 is withdrawn in view of the newly discovered reference(s) as relied upon in the above obvious type double patenting and the JP documents .

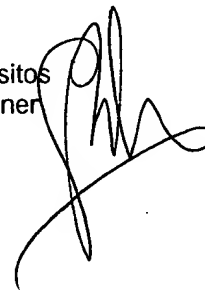
Rejections based on the newly cited reference(s) are as stated above.

.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
Art Unit 2653



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